

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ISRAEL A. LESK, ROBERT B. DAVIES,  
ROBERT E. RUTTER, and LOWELL E. CLARK

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Appeal No. 96-0155  
Application 07/829,660<sup>1</sup>

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ON BRIEF

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Before GARRIS, WEIFFENBACH, and PAK, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

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<sup>1</sup> Application for patent filed February 3, 1992.

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This is a decision on an appeal from the final rejection of claims 1 through 25 which are all of the claims in the application.

The subject matter on appeal relates to a method useful in the backside processing of semiconductor wafers which comprises bonding a processed first surface of the semiconductor wafer to a support means such as a handle wafer prior to processing a second surface of the wafer. This appealed subject matter is adequately illustrated by independent claims 8 and 18 which read as follows:

8. A method useful in the backside processing of semiconductor wafers comprising the steps of:

providing a semiconductor wafer having a first surface being substantially processed and a second surface;

bonding said first surface of said semiconductor wafer to a handle wafer;

thinning said semiconductor wafer from said second surface;

dicing said semiconductor wafer while bonded to said handle wafer to form individual dice; and

removing said individual dice from said handle wafer.

18. A method useful in the backside processing of semiconductor wafers comprising the steps of:

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providing a semiconductor wafer having a first surface being substantially processed and a second surface;

bonding said first surface of said semiconductor wafer to support means;

thinning said semiconductor wafer from said second surface;

implanting impurities into said semiconductor wafer through said second surface; and

removing said semiconductor wafer from said support means.

The prior art relied upon by the examiner as evidence of obviousness is set forth below:

Corrie	4,946,716	Aug. 7, 1990
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Admitted Prior Art	Pages 1-2 of the specification
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All of the claims on appeal stand rejected under the first paragraph of 35 U.S.C. § 112 "as failing to provide an adequate written description of the invention" (answer, page 3, also page 4).

Claims 8 through 14 and 18 through 25 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of Corrie.

Although the appellants assert that at least certain of the appealed claims should not stand or fall together (see pages 4 and 5 of the brief), no specific arguments have been

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advanced concerning any particular claim taken individually. See 37 CFR § 1.192(c)(5)(6)(1993) and Ex parte Schier, 21 USPQ2d 1016, 1019 (Bd. Pat. App. & Int. 1991). As a consequence, we will treat the claims as standing or falling together in accordance with their groupings in the above noted rejections.

#### OPINION

The section 112, first paragraph, rejection of appealed claims 1 through 25, whether based on the written description requirement or the enablement requirement, cannot be sustained for the reasons well stated by the appellants on pages 5 through 7 of their brief.

Concerning the section 103 rejection, the appellants contend that neither Corrie nor the admitted prior art contains any teaching or suggestion of the bonding feature or the handle wafer/support means feature of their rejected claims and argue that "prior art which does [sic, does] not teach or suggest bonding, a handle wafer, nor a bonding intermediate or binder can [sic, cannot] render obvious claims specifically reciting bonding a surface of a semiconductor wafer to either support means or a handle wafer" (brief, page

8). In response, the examiner explicitly points out, inter alia, that "col. 2, lines 51-60 of Corrie teaches and suggests as much" (answer, page 7).

The above noted portion of the Corrie reference refers to a prior art patent in which "it is proposed that a CCD imager... should be supported during thinning by means of a plate of molybdenum, aluminum or glass that is bonded to the die using epoxy adhesive or a bonding alloy" (col. 2, lines 51-56). Thus, as indicated by the examiner, the aforequoted disclosure teaches bonding (i.e., via epoxy adhesive or a bonding alloy) a wafer (i.e., a CCD imager) to a handle wafer/support means (i.e., a plate of molybdenum, aluminum or glass). Moreover, it is significant that the appellants have not filed a reply brief or any other response challenging the examiner's position on this matter.

In essence, the examiner has specifically identified the portion of the Corrie reference which he considers to disclose the here claimed features argued by the appellants to be not taught or suggested by the prior art, and the examiner's position on this matter has not been contested by the appellants on the record before us. Under these

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circumstances, we have little choice but to regard as unpersuasive the appellants' arguments against the examiner's section 103 rejection. We shall sustain, therefore, the rejection of claims 8 through 14 and 18 through 25 under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of Corrie.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

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	Bradley R. Garris	)	
	Administrative Patent Judge	)	
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	Cameron Weiffenbach	)	BOARD OF
PATENT			
	Administrative Patent Judge	)	APPEALS AND
		)	INTERFERENCES
		)	
		)	
	Chung K. Pak	)	
	Administrative Patent Judge	)	

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